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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,122	11/09/2001	Paul Stypulkowski	11738.00024	2402

27581 7590 08/05/2004

MEDTRONIC, INC.
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EXAMINER

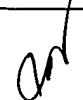
SCHAETZLE, KENNEDY

ART UNIT PAPER NUMBER

3762

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,122	STYPULKOWSKI, PAUL 	
	Examiner	Art Unit	
	Kennedy Schaetzle	3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 15-22, 45 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 23-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/4/02, 7/8/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION
Election/Restrictions

1. Applicant's election with traverse of Group II in the reply filed on May 21, 2004 is acknowledged. The traversal is on the ground(s) that the Office Action stated that combination claim 1 did not specify an extension unit. The applicant then goes on to quote claim 1 in an attempt to show that the extension unit is recited. This is not found persuasive because the applicant took the examiner's comment out of context. The examiner never asserted that claim 1 did not recite an extension unit. The actual quote from the previous Office Action is as follows: "...the combination does not require an extension unit *with an array of programmable switches* [emphasis added]." The applicant further argues that as amended, the method claims are now inseparable from the apparatus claims. The examiner does not agree that the amendment accomplishes this feat. The apparatus does not require any means to determine optimal electrode configuration. The examiner does, however, agree that the newly submitted apparatus claims are inseparable. In view of this and despite the legitimacy of the original restriction requirement, the examiner will examine all of the apparatus claims currently present. The examiner also wishes to make it clear on the record that despite the applicant referring to claim 24 as depending on claim 23 (page 11 of the Remarks), claim 24 will be considered to be independent with the reference to claim 23 merely being a short-hand technique to incorporate the subject matter of claim 23 into claim 24.
2. The requirement is still deemed proper between the method and the apparatus and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-14 and 23-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Pohndorf et al. (Pat. No. 4,628,934).

Regarding claim 1, Pohndorf et al. disclose an apparatus comprising an implantable pulse generator (pacer 20) having a number of output sources that transmit electrical signals (note feedthroughs 350 or 381 and 382 of Figs. 8 and 9 respectively) to an implantable electrode array having a number of electrodes (31-34, etc. as shown in Fig. 1), wherein the number of electrodes is greater than the number of output sources, and an extension unit (elements 348 or 378 of Figs. 8 and 9) coupled between the implantable pulse generator and the implantable electrode array and configured to electrically connect the output sources to a portion of the electrodes.

The structure recited in claims 2-4 is clearly anticipated.

Regarding claim 5, the examiner considers the electrodes on leads 26 and 28 shown in Fig. 1 to constitute a multi-dimensional array arrangement.

Regarding claims 6, 25 and 44, the distance between the implantable pulse generator and the extension unit as compared to the distance between the extension unit and the electrode array is relative. One could, for example, take the highly flexible electrode lead and bend it so that the tip of the lead touches near the extension unit, making the distance between the electrode array and the extension unit less than the distance between the extension unit and the pulse generator. Furthermore, the reference to a distance between a first and second landmark as being greater than a distance between a second and a third landmark can be easily met when the recitation is given its broadest reasonable interpretation. One can take, for instance, a diameter of the lead between the extension unit and electrode array (or any other arbitrary measurement) to be a distance between the unit and the array, and compare this to a distance as measured from the pulse generator to the extension unit and say that the distance represented by the diameter of the lead is less than the distance represented by the second measurement.

Claims 7 and 8 are clearly anticipated. Claim 7 is in fact so broadly drafted, that if allowed in its present state, literally every multiplexer switch ever manufactured would infringe on the claim. Intended use for the switch in the preamble will have little effect in distinguishing over the prior art of record in the absence of any language in the body of the claim limiting the switch to such use. The examiner encourages the applicant to

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make substantive revision to the claim in order to avoid continued rejection of such unduly broad subject matter. Parallel comments apply to claims 23 and 26.

Regarding claim 9, Pohndorf et al. teach that the switches in the programmable array may be bistable magnetic reed switches in col. 10, lines 12-24. Such relay switches are considered to retain their switching state after power has been removed. The devices are in microcircuit form as per col. 9, lines 53-68.

Regarding claims 10-12 and claims with similar limitations, the examiner considers the electrical paths containing the zener diodes shown in Figs. 3 and 3A to constitute an array of wave shaping circuits, with the diodes inherently shaping the amplitude and frequency of signals received on the output sources in order to attenuate high energy pulses and prevent damage to circuitry.

Concerning claims 13 and 14, the examiner considers any magnetically activated switch to be mechanically and magnetically adjustable. The term "adjustable" merely means capable of adjustment.

Claim 23 is clearly anticipated.

Regarding claim 24, note col. 10, lines 25-40 where the function of sensing is discussed.

Claims 26 and 27 are clearly anticipated. As drafted and stripped of its intended use statements and non-limiting functional language, claim 26 is simply directed to an extension unit comprising input lines, output lines and an array of switches connected there-between. As stated above, a simple multiplexer switch would read on the claim (or even common household light switches). The "...for electrically connecting..." recitation in the claim preamble is considered to be a statement of intended use unsupported by sufficient structural recitation in the claim body and therefore does not give life and meaning to the claim. The "...for receiving..." and "...for electrical connection..." clauses associated with the input and output lines are merely functional statements. Any input line or output line *capable* of meeting these functional statements would meet the limitations of the claim. Since an input line or an output line can be represented simply by a conductive path or wire, clearly any such path can receive input signals or electrically connect to electrodes. The "whereby" clause is non-limiting

because it simply states a desired result. Once again the examiner recommends substantial revision.

Regarding claims 28 and 33, note the rejection of claim 9 above.

Regarding claims 38 and 39, note the rejection of like claims 13 and 14 above.

Claim 40 is clearly anticipated.

Regarding claim 41, note the rejection of like claim 24 above.

Claim 42 is clearly anticipated.

Regarding claim 43, note the rejection of like claim 5 above.

Conclusion

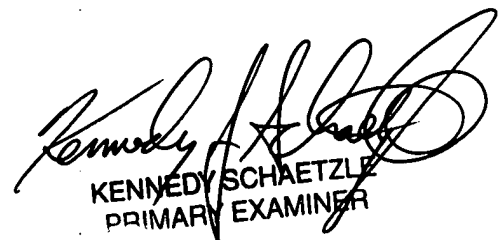
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kennedy Schaetzle whose telephone number is 703 308-2211. The examiner can normally be reached on 9:30 -6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703 308-0851. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KJS
August 3, 2004


KENNEDY SCHAETZLE
PRIMARY EXAMINER